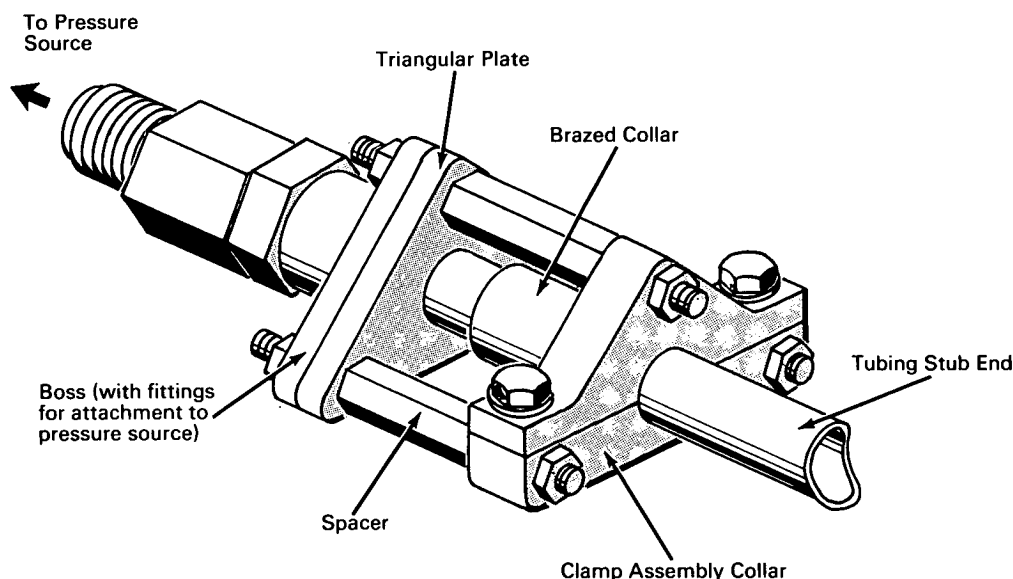


NASA TECH BRIEF



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Adapter Assembly Prevents Damage to Tubing During High Pressure Tests



The problem:

To prevent damage to tubing and injury to personnel when pressurizing a system or during high pressure tests. Frequently, the tube end would be damaged by the unsatisfactory method of attachment to the pressure source, or the connecting device would blow off the tube end because it would not hold in place under pressure.

The solution:

A portable adapter assembly that is capable of withstanding high pressure is securely attached to the

tubing stub end, and may be removed without having to debraise, cut, or clean the tubing.

How it's done:

The tubing stub end has a brazed collar for mechanical attachment to the adapter. The split halves of the clamp assembly are secured to the tubing immediately behind the brazed collar and the triangular plate is positioned in front of it. A rubber O-ring, which serves as a seal when compressed, is slipped over the tubing. The boss plate, with fittings for attachment to the pressure source, receives the

(continued overleaf)

stub end tubing, and the adapter assembly is then tightened with the spacer nuts and bolts.

Note:

Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
Houston, Texas 77058
Reference: B66-10330

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546:

Source: L. L. Stinett
of North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-563)